

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addiese: COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/533,916	05/06/2005	Masanori Ogawa	2710/74365	2370
Ocnaid S Dowden Cooper & Dunham 1185 Avenue of the Americas New York, NY 10036			EXAMINER	
			LE, NINH V	
			ART UNIT	PAPER NUMBER
,			4151	
			MAIL DATE	DELIVERY MODE

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/533 916 OGAWA ET AL. Office Action Summary Examiner Art Unit Ninh V. Le 4151 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-17 is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-17 is/are rejected. 7) Claim(s) 1 and 8 is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 06 May 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SE/08)
Paper No(s)/Mail Date ______

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

Application/Control Number: 10/533,916 Page 2

Art Unit: 4151

DETAILED ACTION

Specification

- The disclosure is objected to because of the following informalities: "polyaarylate" (Page 3 Line 4) needs to be –polyarylate – to make specification clearer. Appropriate correction is required. Appropriate correction is required.
- The disclosure is objected to because of the following informalities: "polyamideimide" (Page 3 Line 5) needs to be -- polyamide-imide -- to make specification clearer. Appropriate correction is required.
- 3. The disclosure is objected to because of the following informalities: "ethelen-propylene-terpolymer" (Page 3 Line 29) needs to be -- ethylene-propylene-terpolymer to make specification clearer. Appropriate correction is required.
- 4. The disclosure is objected to because of the following informalities: "acrylonitrile-butadiene-stylene" (Page 4 Line 1) needs to be -- acrylonitrile-butadiene-styrene -- to make specification clearer. Appropriate correction is required.
- 5. The disclosure is objected to because of the following informalities: "polyethyleneterephthalate" (Page 4 Line 6) needs to be – polyethylene terephthalate -to make specification clearer. Appropriate correction is required.
- 6. The disclosure is objected to because of the following informalities: "polybutyreneterephthalate" (Page 4 Line 6) needs to be – polybutylene terephthalate – to make specification clearer. Appropriate correction is required.

Application/Control Number: 10/533,916
Art Unit: 4151

7. The disclosure is objected to because of the following informalities: "polyamideimide" (Page 4 Line 9) needs to be -- polyamide-imide - to make specification clearer. Appropriate correction is required.

- 8. The disclosure is objected to because of the following informalities: "celluloseacetate" (Page 4 Line 11) needs to be cellulose acetate to make specification clearer. Appropriate correction is required.
- 9. The disclosure is objected to because of the following informalities: "polyallylether" (Page 4 Line 12) needs to be – polyallyl ether – to make specification clearer. Appropriate correction is required.
- 10. The disclosure is objected to because of the following informalities: "polytetrafuluoroethethylen" (Page 4 Line 13) needs to be polytetrafluoroethylene to make specification clearer. Appropriate correction is required.
- 11. The disclosure is objected to because of the following informalities: "ethylene-propylene-ethyliden-norbornene copolymer rubber" (Page 6 Line 25) needs to be ethylene-propylene-ethylidene-norbornene copolymer rubber to make specification clearer. Appropriate correction is required.
- 12. The disclosure is objected to because of the following informalities: "ethylene-butene-1-ethyliden-norbornene copolymer rubber" (Page 6 Line 28) needs to be ethylene-butene-1-ethylidene-norbornene copolymer rubber to make specification clearer. Appropriate correction is required.

Art Unit: 4151

13. The disclosure is objected to because of the following informalities: "styrene-isoprene-stylene copolymer" (Page 6 Line 32) needs to be – styrene-isoprene-styrene copolymer – to make specification clearer. Appropriate correction is required.

- 14. The disclosure is objected to because of the following informalities: "styrene-hydrogeneted-polyolefin-styrene copolymer" (Page 6 Line 33) needs to be styrene-hydrogeneted-polyolefin-styrene copolymer to make specification clearer. Appropriate correction is required.
- 15. The disclosure is objected to because of the following informalities: "polyphenylen" (Page 8 Line 5) needs to be polyphenylene to make specification clearer. Appropriate correction is required.
- 16. The disclosure is objected to because of the following informalities: "masking member(1)" (page 10 Line 19) is inconsistent with "green masking member(1)" (Page 10 Line 29) is inconsistent with "masking member (11)" (Page 11 Line 6) is inconsistent with "masking member (21)" (Page 11 Line 33). Correction is necessary throughout the whole specification to make it clearer. Appropriate correction is required.
- 17. The disclosure is objected to because of the following informalities: The following terminology is inconsistent with respect to the numbering elements: "fitting grooves (2A,2B,2C)" (Page 10 Line 20) is inconsistent with "frame bar grooves (2A, 2B)" (Page 10 Line 15) is inconsistent with "vertical fitting groove (2A)" (Page 10 Line 22) is inconsistent with "horizontal(longitudinal) fitting grooves (2B)" (Page 10 Line 21-22) is inconsistent with "vertical fitting groove (2C)" (Page 10 Line 25) is inconsistent with

Art Unit: 4151

"pillar groove(2C)" (Page 11 Line 1). Correction is necessary throughout the whole specification to make it clearer. Appropriate correction is required.

- 18. The disclosure is objected to because of the following informalities: "convex parts (2,2)" (Page 11 Line 25-26) should be convex parts (7) to make specification clearer. Appropriate correction is required.
- The disclosure is objected to because of the following informalities: "vertical ribs(2,2), horizontal ribs (3,3)" (Page 12 Line 3-4) not supported by drawing figures.
 Appropriate correction is required.
- 20. The disclosure is objected to because of the following informalities: "vertical ribs(2,2) and horizontal ribs (3,3)" (Page 12 Line 7) not supported by drawing figures. Appropriate correction is required.
- 21. The disclosure is objected to because of the following informalities: "support pillars (6C, 6C) (Page 11 Line 10,23 and Page 12 Line 3) needs to be support pillars (6C) to make specification clearer. Appropriate correction is required.
- 22. The disclosure is objected to because of the following informalities: "convex parts (7,7)" (Page 11 Line 14,18) needs to be -- convex parts (7) -- to make specification clearer. Appropriate correction is required.
- 23. The disclosure is objected to because of the following informalities: "masking member of this type(1)" (Page 11 Line 21) needs to be masking member (1) of this type to make specification clearer. Appropriate correction is required.
- The disclosure is objected to because of the following informalities: "BRIEF DESCRIPSION OF THE DRAWINGS" (Page 3 Line 13) needs to be – BRIEF

Art Unit: 4151

DESCRIPTION OF THE DRAWINGS – to make specification clearer. Appropriate correction is required.

- 25. The disclosure is objected to because of the following informalities: "another embodiment" (Page 3 Line 17-20) is unclear to what embodiment is referencing to. Appropriate correction is required.
- 26. The disclosure is objected to because of the following informalities: "DESCRIPTION OF NOTATIONS" (PAGE 3 Line 21-22) needs to be within brief description of the drawings section explaining what each numerical number represent Appropriate correction is required.
- 27. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In claim 1, "green masking member" lacks proper antecedent basis. Specification does not provide means for preparation of green masking member.

Drawings

28. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "1","11", and "21" have both been used to designate masking member. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each

Art Unit: 4151

drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- 29. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "3" has been used to designate car body and horizontal ribs. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- 30. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "2A" has been used to designate bar grooves, fitting grooves, and vertical fitting grooves. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being

Art Unit: 4151

amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- 31. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "2B" has been used to designate bar grooves, fitting grooves, horizontal (longitudinal) fitting grooves, and horizontal fitting grooves. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- 32. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "2C" has been used to designate pillar grooves, fitting grooves, and vertical fitting groove. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures.

Art Unit: 4151

appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- 33. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "1" has been used to designate both masking member and green masking member. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- 34. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the

Art Unit: 4151

immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abevance.

Claim Objections

- 35. Claims 1 and 8 are objected to because of the following informalities: in claim 8, "polyamideimide" (Line 5) needs to be polyamide-imide to make the claim clearer.
- 36. Claim 1 is objected to because of the following informalities: Claim 1 recites the limitation "the part" in line 5. There is insufficient antecedent basis for this limitation in the claim.
- It is suggested to amend to a part or define a part earlier in the claim.
 Appropriate correction is required.

Claim Rejections - 35 USC § 102

38. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 4151

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagoya
 Oilchemical Co., Ltd. European Patent Application EP 1095708A1 (hereinafter Nagoya
 (already of record).
- 40. In reference to Claim 1, Nagoya '708 teaches a method for manufacturing a masking member comprising; the preparation of a green masking member (masking member, Page 5 [0036] Line 1) by stretch molding a thermoplastic resin sheet (stretched sheet, Page 5 [0036] Line 3), the size of said green masking member being determined considering the margin of contraction (said sheet having said thickness has a good moldability, Page 4 [0035] Line 56), and then heating and softening (softened by heating, Page 4 [0034] Line 52) said green masking member to achieve the size (thickness, Page 4 [0035] Line 55) and shape (shape, Page 4 [0035] Line 52) suitable for the part to be masked (part to be protected. Page 4 [0035] Line 57-58).
- 41. In reference to Claim 2, wherein said heating and softening treatment is carried out at a temperature below that of the melting point of said thermoplastic resin sheet (masking member...treated by the curing process at the temperature of about 170 °C, Page 9 [0055] Line 46-47). Note, Nagoya '708 teaches the deformation of the plastic sheets at 200 °C (Page 6 [0040] Line 5). The deformation at this temperature is equivalent to the melting point for the plastic sheet. Therefore, curing at about 170 °C is below the melting point of the plastic sheet as stated in claim 2.

Art Unit: 4151

- 42. In reference to Claim 3, wherein said thermoplastic resin sheet is made of a thermoplastic resin into which a filler is mixed (one or more kind of filler...added to the materials of said masking member, Page 3 [0025] Line 53 and Page 4 [0025] Line 4).
- In reference to Claim 4, wherein said thermoplastic resin sheet is a foamed thermoplastic resin sheet (foamed masking member, Page 4 [0027] Line 13-14).
- 44. In reference to Claim 5, wherein said thermoplastic resin sheet is made of a polyolefin group resin (polyolefin type resin, Page 3 [0017] Line 17).
- 45. In reference to Claim 6, wherein said thermoplastic resin sheet is made of a polystyrene group resin (polystyrene type resin, Page 3 [0017] Line 21).
- 46. In reference to Claim 7, wherein said thermoplastic resin sheet (masking member, Page 2 [0007] Line 28) is made of a polymer alloy (polymer alloy, Page 2 [0007] Line 28) containing an amorphous thermoplastic resin (polycarbonate...polystyrene type resin such as polystyrene, Page 3 [0017] Line 20-21) and a crystalline thermoplastic resin (polypropylene...poly(ethylene terephtalate), poly(butylene terephtalate), Page 3 [0017] Line 18,24).
- 47. In reference to Claim 8, wherein said amorphous thermoplastic resin(s) is (are) of one or more kind(s) of resin(s) selected from a group consisting of polystyrene (polystyrene, Page 3 [0017] Line 21), acrylonitrile-butadiene-styrene resin (acrylonitrile-butadiene-styrene, Page 3 [0017] Line 22), polycarbonate (polycarbonate, Page 3 [0017] Line 20), modified polyphenylene ether (polyphenylene ether (PPE) or modifications thereof, Page 2 [0007] Line 30), polyphenylene.ether (polyphenylene

Art Unit: 4151

ether, Page 2 [0007] Line 30), polysulfone (polysulfone, Page 2 [0007] Line 29), polyarylate (polyarylate, Page 6 [0039] Line 3), polyimide, polyetherimide (polyetherimide, Page 2 [0007] Line 31), polyethersulfone (polyethersulfone, Page 2 [0007] Line 30), and polyamideimide (polyamide-imide, Page 2 [0007] Line 31), with said crystalline-thermoplastic resin(s) being a polyolefin group resin and/or polyamide group resin (polyolefin type resin...polyamide type resin, Page 3 [0017] Line 17,20).

- 48. In reference to Claim 9, wherein said stretch molding (stretched sheet, Page 5 [0036] Line 3) is achieved by vacuum and/or pressure forming (press molding...vacuum molding, Page 5 [0036] Line 1-2).
- 49. In reference to Claim 10, wherein said thermoplastic resin sheet is made of a thermoplastic resin into which a filler is mixed (one or more kind of filler...added to the materials of said masking member, Page 3 [0025] Line 53 and Page 4 [0025] Line 4).
- In reference to Claim 11, wherein said thermoplastic resin sheet is a foamed thermoplastic resin sheet (foamed masking member, Page 4 [0027] Line 13-14).
- In reference to Claim 12, wherein said thermoplastic resin sheet is made of a
 polyolefin group resin (polyolefin type resin, Page 3 [0017] Line 17).
- 52. In reference to Claim 13, wherein said thermoplastic resin sheet is made of a polystyrene group resin (polystyrene type resin, Page 3 [0017] Line 21).
- 53. In reference to Claim 14, wherein said thermoplastic resin sheet (masking member, Page 2 [0007] Line 28) is made of a polymer alloy (polymer alloy, Page 2

Art Unit: 4151

[0007] Line 28) containing an amorphous thermoplastic resin polycarbonate - polystyrene type resin such as polystyrene, Page 3 [0017] Line 20-21) and a crystalline thermoplastic resin (polypropylene - poly(ethylene terephtalate), poly(butylene terephtalate), Page 3 [0017] Line 18,24).

- 54. In reference to Claim 15, wherein said thermoplastic resin sheet is made of a polyolefin group resin (polyolefin type resin, Page 3 [0017] Line 17).
- 55. In reference to Claim 16, wherein said thermoplastic resin sheet is made of a polystyrene group resin (polystyrene type resin, Page 3 [0017] Line 21).
- 56. In reference to Claim 17, wherein said thermoplastic resin sheet (masking member, Page 2 [0007] Line 28) is made of a polymer alloy (polymer alloy, Page 2 [0007] Line 28) containing an amorphous thermoplastic resin (polycarbonate...polystyrene type resin such as polystyrene, Page 3 [0017] Line 20-21) and a crystalline thermoplastic resin (polypropylene...poly(ethylene terephtalate), poly(butylene terephtalate), Page 3 [0017] Line 18,24).

Conclusion

 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nagoya OilChemicals Japanese Publication JP 10-192754 A. Application/Control Number: 10/533,916 Page 15

Art Unit: 4151

58. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ninh V. Le whose telephone number is (571)270-3828. The examiner can normally be reached on Monday - Friday 7:30 AM - 5:00 PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on (571)272-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NVI

/Angela Ortiz/

Supervisory Patent Examiner, Art Unit 4151